

## CHAPTER 212 CONDUCT AN INCIDENT INVESTIGATION

### Section 1 Background

#### 1. PTRS ACTIVITY CODES

A. *Maintenance:* 3711/3712

B. *Avionics:* 5711/5712

C. *Cabin Safety:* Pending

**3. OBJECTIVE.** This chapter supplements the guidance found in Order 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting, as amended, for conducting an incident investigation.

#### 5. GENERAL

A. Since this order does not supersede Order 8020.11, as amended, it is recommended that both orders be used during the aircraft incident investigation.

B. *Pre-Accident Plan.* A pre-accident plan should be developed by the FSDO and should reflect each office's specific requirements (e.g., geographic location, climate, staffing, resources, etc.). The success of an incident investigation often depends on how well the pre-accident plan is kept current, rehearsed, and carried out.

#### 7. RESPONSIBILITIES

A. *FAA Responsibilities.* FAA incident investigation responsibilities include the following:

(1) To ensure that:

- All facts and circumstances leading to the incident are recorded and evaluated
- Actions are taken to prevent similar incidents in the future

(2) To determine if:

- There was a violation of the Federal Aviation Regulations
- The performance of FAA facilities or functions was a factor
- The airworthiness of U.S. certificated aircraft was a factor
- The competency of U.S. certificated airmen, air agencies, commercial operators, air carriers, or airports was a factor
- The Federal Aviation Regulations were adequate
- The airport certification safety standards or operations were involved
- The air carrier/airport security standards or operations were involved
- Airman medical qualifications were involved

B. *FAA and National Transportation Safety Board Investigation (NTSB) Agreements*

(1) FAA procedures for participation in an NTSB investigation will be the same as in an NTSB-conducted accident investigation.

(2) NTSB and FAA agreements for incident investigations are found in Order 8020.11, as amended.

C. *Regional Divisions and Branches in Aircraft Incident Investigations.* In order to meet agency requirements, other FAA personnel may be required to participate in an incident investigation. In these situations a representative is designated

to coordinate the division/branch responsibilities and provide assistance and any required reports to the FAA Investigator-In-Charge.

#### *D. Investigator-In-Charge's Responsibilities*

(1) The FAA will at all times have an Investigator-In-Charge designated as the principal representative. The designation as Investigator-In-Charge constitutes that person's authority to procure and utilize the services of all needed FAA personnel, facilities, equipment, and records.

(2) The Investigator-In-Charge directs and controls all FAA participation until the incident investigation is complete. During the assignment as Investigator-In-Charge, responsibility is direct to the Director of Aviation Safety, ASF-1, through the Manager, ASF-100.

#### *E. FAA Participant Responsibilities*

(1) Participants are accountable to the Investigator-In-Charge in all matters related to the investigation. Participants cannot withdraw from the investigation without the concurrence of the Investigator-In-Charge. Participants will submit reports when requested by the Investigator-In-Charge.

(2) Participants will not supply information or reports to any person outside their assigned group except with the full knowledge and consent of the Investigator-In-Charge.

(3) Personnel representing the FAA organizational element authorized access to the incident scene are subject to the requirements of paragraph (1) and (2) above. These personnel must provide the Investigator-In-Charge with reproducible copies of all reports that they have prepared or received during the investigation.

(4) FAA personnel not specifically assigned as participants or support personnel are not permitted at the scene of an accident/incident without the knowledge and consent of the Investigator-In-Charge.

#### *F. Other Agency Or Organization Responsibilities*

(1) Regional Air Traffic (AT) Division Managers are responsible for the investigation and reporting of incidents that involve only air traffic functions (e.g., operational errors/deviations).

(a) The Investigator-In-Charge must determine the extent of investigation necessary before requesting an Air Traffic package. When Air Traffic provides notification on an FAA Form 8020-11, Incident Report, the Flight Standards investigation office will inform the reporting facility of the final disposition of the incident.

(b) When Air Traffic personnel or facilities are involved, the Investigator-In-Charge will afford such parties an opportunity to provide comment and will indicate on the report that this opportunity was given.

(2) Regional Airports, Airway Facilities Divisions, and the appropriate Aircraft Certification Office will be notified by the Investigator-In-Charge when functions of those offices are involved in the incident.

(3) Detailed responsibilities for other agencies or organizations can be found in Order 8020.11, as amended.

**9. TYPES OF INCIDENT INVESTIGATIONS.** The type of incident refers to the immediate circumstances of the incident, not the cause. All of these incidents will be investigated according to the procedures in Order 8020.11, as amended. The following are some of the different classifications that might be encountered:

- Aircraft that have been damaged but do not meet the definitions of an accident, including the exceptions listed under substantial damage in Vol. 2, Ch. 210, Introduction to Conducting Accident and Incident Investigations, Processing a Violation Package, and Responding to a Complaint
- Incidents involving military aircraft
- Foreign air carrier incidents

- Near midair collisions
- Emergency evacuations
- Parachute jumping
- Reckless flying

**11. METHOD OF INVESTIGATION.** The type of incident will dictate what action the Investigator-In-Charge should take (e.g., on-site investigation, desk audit).

A. *Desk Audit.* The Investigator-In-Charge can usually conduct the entire investigation from the office (desk audit). When specific airman or aircraft data is required during a desk audit, the information should be obtained from microfiche, Aviation Safety Analysis System (ASAS), or from a reputable source.

B. *On-Site Investigation.* Although most incident investigations can be handled by the use of a desk audit, there will be circumstances that require an on-site investigation. The Investigator-In-Charge determines whether an on-site investigation is necessary based on the initial information received regarding the incident. Circumstances that might preclude a desk audit can be based on the following variables:

- (1) Whether the incident involves aircraft damage
- (2) Whether there was an emergency evacuation
- (3) Whether the office policy dictates the method based on the following:
  - The geographic location
  - The type of incident
  - The depth of the FAA's involvement

C. *Organizing the Investigation.* Organizing an incident investigation is a process that begins with the initial notification and continues throughout the investigation. There may be occasions when the Investigator-In-

Charge is the only participant in the investigation. In this instance, the Investigator-In-Charge should still formulate a plan that can be followed throughout the investigation.

### 13. POST-NOTIFICATION ACTIVITIES

A. *FAA Incident Investigations.* Certain steps have to be taken to initiate an FAA incident investigation. The facilities of the Regional Operations Center (ROC) can be used in establishing the necessary contacts and coordination with the following, as applicable:

- (1) Law enforcement or airport authorities for:
  - Site security
  - Information on accessibility of the site and environmental conditions
  - Arrangements for local travel to the site, etc.
- (2) Nearest Aviation Medical Examiner (AME), for arrangements for toxicological tests
- (3) Manufacturer, operator, or owner for specific assistance, such as documents, certificates, data, etc.
- (4) Flight Service Station (FSS), Air Traffic Center (ATC), and tower facilities for:
  - Preliminary information on flight plan and pilot's intent
  - Radio communications
  - Flight progress reports, etc.
- (5) National Weather Service, FAA facilities, or certified observers for relevant weather information

#### B. *Office Coordination*

- (1) Coordination will be necessary to ensure that response time to an incident investigation is done in a timely manner.

(2) Coordination should be established to give local authorities the name of the Investigator-In-Charge and the expected time of arrival. Before departing, the Investigator-In-Charge should designate an initial contact point to which messages can be sent during the transient status.

*C. Investigation Equipment.* The diversity of aircraft incidents makes it difficult to have all the necessary equipment available. Certain items commonly used in every investigation should be kept in readiness. Each office must develop their own requirements per those in Order 8020.11, as amended.

*D. Safety At The Site.* This is an area of vital importance and should be addressed by the Investigator-In-Charge when planning the investigation activities. Aspects to be considered include both ASI and bystander safety.

(1) The Investigator-In-Charge's responsibility will include planning for the following possible on-site hazards:

- Pressurized systems and components, including hydraulic, pneumatic, and oxygen systems
- Blowout (explosion) of damaged landing gear tires
- Sharp, jagged pieces of metal
- Weak ice when aircraft is located on ice
- Reactions of toxic agents present in a fire
- Hazardous agricultural chemicals

(2) Additional consideration to be taken by the Investigator-In-Charge include the following:

- Delaying the handling of materials if there is the slightest reason to suspect the presence of hazardous cargo, including radioactive materials or chemicals. The delay should last until the necessary checks have been made and the site has been declared safe.

- Taking into account the advice of local experts, such as Aeronautical Medical Examiners (AMEs), CAMI industrial hygienists, forest rangers, mountain rescue teams, surveyors, and law enforcement personnel, as to the type of protection and precautions needed in certain terrain
- Ensuring that all personnel use personal protection against possible contamination by communicable diseases
- Securing all critical areas to ensure bystander safety

#### *E. Pilot Deviations*

(1) If the incident involves a pilot deviation or operational error, certified true copies of the following should be requested from the reporting Air Traffic Facility, as applicable:

- Pertinent Air Traffic Center flight progress strips
- Communication tapes
- Radar printouts

(2) These items should be sent to the district office as soon as possible so that the Investigator-In-Charge can use them for the investigation. These items will become a part of the final report.

*F. Analysis Considerations.* During the documentation and investigation process certain evidence will require a more detailed examination. The Investigator-In-Charge should be continually evaluating evidence as a possible contributing factor.

*G. FAA Incident Reports.* The Investigator-In-Charge is responsible for the report, and if requested, providing a copy of the report to the NTSB.

(1) This report must be submitted after the completion of the investigation and must contain the facts, conditions, and circumstances disclosed by the investigation.

(2) The NTSB will determine the accident prevention recommendations from the contents of this report. Therefore, the incident report must be an accurate reflection of all pertinent data and reports collected by the FAA investigation team.

## 15. WITNESS STATEMENTS

A. If a violation is suspected, there are additional requirements for the handling of witness statements. These requirements include the following:

- If a witness objects to a copy of their statement being used, they must be informed that they may be subpoenaed if enforcement action is taken
- When taking witness statements over the telephone, use FAA Form 1360-33, Record of Visit, Conference, or Telephone Call

B. For further guidance on witness statements, see Order 8020.11, as amended.

**17. VIOLATIONS.** If at any time during the investigation facts are revealed that indicate a possible violation of the Federal Aviation Regulations, the Investigator-In-Charge must follow the procedures in Vol. 2, Ch. 213, Conduct Violation Investigation.

**19. UPGRADING AN INCIDENT TO AN ACCIDENT.** If the investigation reveals facts that would indicate an upgrade to an accident, the Investigator-In-Charge must:

- Notify the appropriate Air Traffic facility and NTSB
- After the upgrade, proceed with the procedures outlined in Vol. 2, Ch. 211, Conduct Incident Investigation

## Section 2 Procedures

### 1. PREREQUISITES AND COORDINATION REQUIREMENTS

#### A. Prerequisites

- Knowledge of the regulatory requirements of the Federal Aviation Regulations
- Successful completion of the Airworthiness Inspectors Indoctrination Course or equivalent

B. *Coordination.* This task requires coordination with operations and airworthiness supervisors, the Regional Operations Center (ROC), and the appropriate Flight Service Station.

### 3. REFERENCES, FORMS, AND JOB AIDS

#### A. References

- Federal Aviation Act of 1958, as amended, sections 313(a), 601(b), and 609
- Office Procedure/Policy Manual
- Order 1200.23, Public Availability of Information, as amended
- Order 2150.3, Compliance and Enforcement, as amended
- Order 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting, as amended
- Order 8025.1, Medical Investigation of Aircraft Incidents and Accidents, as amended
- Order 8300.10, Vol. 2, Chs. 210, 211, and 213

B. *Forms*

- FAA Form 1360-33, Record of Visit, Conference, or Telephone Call
- FAA Form 8020-2, Aircraft/Part Identification and Release Tag
- FAA Form 8020-3, Facility Accident Notification Record
- FAA Form 8020-5, Aircraft Incident Record
- FAA Form 8020-9, Aircraft Accident/Incident Preliminary Notice
- FAA Form 8020-11, Incident Report

C. *Job Aids.* None.

## 5. PROCEDURES

A. *Receive the Initial Notification.* Record the initial incident information.

(1) If the notification is made by an Air Traffic (AT) Facility, verify that the following has been initiated, as applicable:

- FAA Form 8020-9, Aircraft Accident/Incident Preliminary Notice
- Appropriate notification procedures

(2) Request from the reporting Air Traffic Facility the following data:

- Flight progress strips
- Air Traffic Center tapes
- Radar printouts
- Weather information

(3) If the incident involves an operational error and/or deviation, determine if the Air Traffic facility is going to submit an FAA Form 8020-11, Incident Report.

(a) If the Air Traffic facility indicates that an FAA Form 8020-11 will not be submitted, terminate the task.

(b) If the Air Traffic facility indicates that an FAA Form 8020-11 will be submitted, make the required notifications.

(4) If notification is made by a source other than an Air Traffic facility, accomplish the following:

(a) Provide the information from FAA Form 8020-9 to the nearest Air Traffic Facility, preferably a Flight Service Station, and verify that the appropriate notification procedures will be initiated

(b) Notify the appropriate office personnel, according to office policy

(c) Notify the Regional Operations Center (ROC), if required

(d) Notify the National Transportation Safety Board (NTSB), if required

(e) Notify the responsible Air Traffic facility and request that certified true copies of the following be submitted:

- Flight progress strips
- Air Traffic Center tapes
- Radar printouts
- Weather information

B. *Determine the FAA Involvement in the Investigation.* If the incident does not involve aircraft damage or is an operational error/deviation, determine the most effective method of investigation.

C. *Classify the Occurrence.* Based on the preliminary information, determine whether the occurrence fits the definition of an incident.

(1) If the occurrence should be classified as an incident, proceed with the following steps.

(2) If the occurrence should be classified as an accident, see Order 8300.10, Vol. 2, Ch. 211, Conduct Accident Investigation.

D. *Review the Air Traffic Facility Reports and Other Related Information.* Upon receipt of the requested forms and reports, determine the FAA involvement in the investigation and review the following for statistical data:

- Location of occurrence
- Time of occurrence
- Weather conditions at time of occurrence
- Other information pertinent to the investigation.

E. *Determine the Method of Investigation.* Base the decision regarding the method of investigation on the information obtained from the reports and personal judgment.

(1) If an on-site investigation is not necessary, conduct the investigation by telephone.

(2) If an on-site investigation is necessary, organize the investigation accordingly.

F. *Organize the Incident Investigation.* Organize the incident investigation based on the information received from the reporting facility or person.

(1) Determine what specialties or other participants are required (e.g., operations, airworthiness, avionics, aviation medicine, etc.).

(2) Make the request for technical support from the FSDO manager or the appropriate office representative according to office policy and procedures.

(3) Brief all participants on the preliminary incident information and their associated responsibilities.

(4) If the investigation requires an on-site investigation, make the necessary preparations per office policy.

G. *Initiate a Telephone Investigation.* Contact each of the owners and/or pilots and all identified witnesses for statements regarding the incident.

(1) Use FAA Form 1360-33, Record of Visit, Conference, or Telephone Call, to record all pertinent information concerning the witness, including the witness's name, address, and a telephone number for future contact.

(2) Document the date and time of the occurrence and request a written statement, if required and the witness is willing.

H. *Prepare for an On-Site Investigation.* Before leaving the office for the incident site, accomplish the following:

(1) Obtain office accident/incident investigation kit.

(2) Contact the appropriate designated person in the office and provide the following:

- The location of the on-site investigation
- The estimated time of arrival
- A list of all persons from the office that will be on-site
- The known background information regarding the incident
- The estimated time of return, if known

### I. *Conduct the Investigation*

- (1) Brief all participants, as appropriate.
- (2) Contact the involved parties and obtain witness statements.
- (3) If an on-site investigation, take pictures using the office camera or make arrangements for another participant to take the pictures, if appropriate. Reference the procedures in Vol. 2, Ch. 211, Conduct an Accident Investigation.
- (4) Obtain any supporting data concerning the aircraft, pilot, weather, etc.
- (5) If crewmen incapacitation was a possible factor, notify the Regional Flight Surgeon.
- (6) If Air Traffic personnel or facilities are involved, request comments from the appropriate Air Traffic facility.

## 7. TASK OUTCOMES

### A. *File PTRS Transmittal Form*

### B. Completion of this task will result in the following:

- (1) Completion of the appropriate sections of FAA Form 8020-5, in accordance with Order 8020.11, as amended, for an FAA investigation

(2) When Air Traffic personnel or facilities are involved, handling of Air Traffic comments on FAA Form 8020-5, as follows:

(a) If the Air Traffic facility does not submit any comments, an indication on FAA Form 8020-5 that an opportunity for comments was afforded but refused

(b) If the Air Traffic facility does submit comments, inclusion of those comments as an attachment to FAA Form 8020-5

(3) Initiation of medical response in accordance with Order 8025.1, Medical Investigation of Aircraft Incidents and Accidents, as amended, if medical certification factors were involved

(4) Placement of the incident number, obtained from FAA Form 8020-11, in the upper right hand corner of section K (Narrative) of FAA Form 8020-5, if there was a pilot deviation

(5) Initiation of the procedures in Order 8300.10, Vol. 2, Ch. 213, Conduct Violation Investigation if a violation of Federal Aviation Regulations is suspected

C. *Distribute the Report.* Distribute the aviation incident reports in accordance with Order 8020.11, as amended.

D. *Document the Task.* File all supporting paperwork in the operator/certificate holder's office file, as applicable.

**9. FUTURE ACTIVITIES.** Conduct a violation investigation, if required.